restia

T-978 P.003/013 F-267 SAR 13632

14:44 FROM-RatnerPrestia
Appln. No. 09/718,225
Amdt. dated March 11, 2003
Reply to Office Action of January 6, 2003

Listing of Claims:

03-11-03

1	 (Currently Amended) A method of depositing at least one island 					
2	of a liquid electronic material in a precise pattern on at least one electrode on a					
3	surface comprising the steps of;					
4	forming a first layer of the at least one electrode on the surface to					
5	provide at least one electrical contact to the at least one island;					
6	forming a second layer of the at least one electrode on a portion of the					
7	first layer of the at least one electrode substantially surrounding the precise pattern					
8	of the at least one island; and					
9	depositing the liquid material on the at least one electrode so that the					
10	second layer of the at least one electrode constrains the liquid electronic material in					
11	the precise pattern.					
12	wherein the fluid is a liquid deposited material.					
1	(Original) A two layer electrode structure to promote the					
2	deposition of a fluid in a precise island pattern comprising;					
3	a first electrode layer formed on a surface;					
4	at least one island of the fluid in the precise island pattern formed on					
5	the first electrode layer and in electrical contact with the first electrode layer; and					
6	a second layer formed in contact with the first electrode layer and					
7	substantially surrounding the at least one island of the precise island pattern.					
1	3. (Original) The two layer electrode structure of claim 2.					
2	3. (Original) The two layer electrode structure of claim 2, wherein the second layer is a low surface energy material.					
4	wherein the second rayer is a low surface efferty filaterial.					

03-11-03 14:44 FROM-RatnerPrestia
Appln. No. 09/718,225
Amdt. dated March 11, 2003
Reply to Office Action of January 6, 2003

T-978 P.004/013 F-267 SAR 13632

1		4.	(Original)	the two layer electrode structure of claim 3,
2	wherein the	low su	ırface energy π	naterial is at least one of Teflon and polyamide.
1		5.	(Original)	The bug layer electrode structure of electron
2	ubossis the		, , ,	The two layer electrode structure of claim 2,
4	wherein the	second	d layer is a con	ductor.
1		6.	(Original)	The two layer electrode structure of claim 2,
2	wherein the	second	d layer includes	s a plurality of sub-layers.
1		7.	(Original)	The two layer electrode structure of claim 6,
2	wherein an i			the second layer is a low surface energy material
-	Wilelett Gil	cxpose	a sab layer or	the second layer is a low spriace energy material
1		8.	(Original)	The two layer electrode structure of claim 6,
2	wherein at least one sub-layer of the second layer includes a conductor.			
1		9.	(Original)	The two layer electrode structure of claim 2,
2	wherein the	first el	ectrode layer is	s a transparent conducting material.
1		10.	(Original)	The two layer electrode structure of claim 9,
2	wherein the			a high conductivity material that is electrically
3			electrode laye	•
•	coupled to ti	ie mst	electrode laye	
1		11.	(Original)	The two layer electrode structure of claim 10,
2	wherein;			•
3		the s	econd layer inc	cludes a plurality of sub-layers; and
4		3n a	enocod out lave	
5	material.	an ez	kposeu sub-iay	er of the second layer is a low surface energy
ے	material.			
1		12.	(Original)	The two layer electrode structure of claim 10,
2	wherein the	first ele	ectrode laver is	formed in the precise island pattern.



03-11-03 14:44 FROM-RatnerPrestia
Appln. No. 09/718,225
Amdt. dated March 11, 2003
Reply to Office Action of January 6, 2003

T-978 P.005/013 F-267 SAR 13632

1	 (Original) The two layer electrode structure of claim 2, 					
2	wherein the first electrode layer is at least one of indium-tin oxide (ITO) polyaniline,					
3	and a thin metal.					
1	14. (Original) The two layer electrode structure of claim 2,					
2	wherein the fluid is a liquid deposited material.					
1	15. (Currently Amended) The two layer electrode structure of					
2	claim 2, wherein the fluid is at least one of a liquid crystal material, an organic light					
3	emitting diode (OLED) material, an electron transport layer material, a hole					
4						
1	16. (Original) The two layer electrode structure of claim 2.					
1	, , , , , , , , , , , , , , , , , , , ,					
2	wherein the fluid is a powder deposition material.					
1	17. (Currently Amended) A method of improving a					
2	conductivity of a transparent electrode structure in an electro-optical device					
3	comprising the steps of;					
4	forming a transmissant electrode material on a curfe as of the class-					
5	forming a transparent electrode material on a surface of the electro- optical device; and					
J	optical device, and					
6	forming a high conductivity material on the surface of the electro-					
7	optical device, the high conductivity material being one of adjacent to and on top of					
8	the transparent electrode material;					
_						
9	wherein the high conductivity material is in electrical contact with the					
10	transparent electrode material and is configured not to obscure light passing through					
11	the transparent electrode material.					
1	18. (Currently Amended) An electrode structure comprising;					
2	a substrate having a surface.					

)

03-11-03 14:44 FROM-RatnerPrestia
Appln. No. 09/718,225
Amdt. dated March 11, 2003
Reply to Office Action of January 6, 2003

T-978 P.006/013 F-267 SAR 13632

3	a first transparent electrode layer formed in a first area of the surface			
4	which corresponds to at least one transparent window; and			
5	a second electrode layer having a higher conductivity than the first			
6	electrode layer and being formed in a second area of the surface, the second			
7	electrode layer being one of adjacent to and on top of the first transparent electrode			
8	layer and being electrically coupled to the first transparent electrode layer.			
1	19. (Original) The two layer electrode structure of claim 18,			
2	wherein the second layer is composed of a plurality of sub-layers.			
I	20. (Original) The two layer electrode structure of claim 19,			
2	wherein an exposed sub-layer of the second layer is a low surface energy material.			
1	21. (Original) The two layer electrode structure of claim 18,			
2	wherein the first transparent electrode layer is indium-tin oxide (ITO).			
l	22. (Original) The two layer electrode structure of claim 21,			
2	wherein the second layer is at least one of polysilicon and a metallic conductor.			
I	 (Original) The two layer electrode structure of claim 21, 			
2	wherein;			
3	the second layer has a plurality of sub-layers, including;			
4	a contact sub-layer including one of titanium-tungsten, palladium, and			
5	titanium, which is in electrical contact with the first transparent electrode layer; and			
£	an aluminum sub-layer which is in electrical contact with the contact			
6 7	sub-layer.			
,				
1	24. (Original) The two layer electrode structure of claim 23,			
2	further including an exposed sub-layer formed from a low surface energy material.			

03-11-03 14:45 FROM-RatnerPrestia

Appln. No. 09/718,225

Amdt. dated March 11, 2003

Reply to Office Action of January 6, 2003

T-978 P.007/013 F-267 SAR 13632

1	25.	(Original)	The two layer electrode structure of claim 18,		
2	wherein the first transparent electrode layer is one of tin oxide, indium-tin oxide,				
3	gold, calcium, and polyaniline.				
1	26.	(Original)	The two layer electrode structure of claim 18,		
2	wherein the second area of the surface corresponds to at least one non-transparent				
3	section.				
1	27.	(Original)	The two layer electrode structure of claim 26,		
2	wherein the first area of the surface includes a portion of at least one non-				
3	transparent sectio	n.			
1	28.	(Original)	The two layer electrode structure of claim 27,		
2	wherein the portio	wherein the portion of each non-transparent section on which the first transparent			
3	electrode layer is t	electrode layer is formed is a whole of the at least one non-transparent section.			
1	29.	(Original)	The two layer electrode structure of claim 18,		
2	wherein the first transparent electrode layer and the second electrode layer extend to				
3	a substantially equ	a substantially equal height above the surface.			
1	30.	(Original)	The two layer electrode structure of claim 26,		
2	wherein the at least one non-transparent section surrounds the at least one				
3	transparent windo	w.			